ENVIRONMENTAL ASSESSMENT

for the

***"Rogue River Ranch Water Treatment System Upgrade Project"***

EA #OR110-02-20

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT
GRANTS PASS RESOURCE AREA

*April 2002*

Dear Reader:

We appreciate your interest in the BLM's public land management activities. We also appreciate your taking the time to review this environmental assessment (EA). If you would like to provide us with written comments regarding this project or EA, please send them to me at Bureau of Land Management, 3040 Biddle Road, Medford, OR 97504. If you would like to email your comments, you can send them to me at *or110mb@or.blm.gov*.

If as you prepare your comments, confidentiality is of concern to you, please be aware that comments, including names and street addresses of respondents, will be available for public review and may be published as part of the EA or other related documents or may be held in a file available for public inspection and review. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must clearly state this at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or officials of organizations or businesses will be made available for public inspection in their entirety.

Abbie Jossie
Field Manager
Grants Pass Resource Area

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT

EA COVER SHEET

RESOURCE AREA: *Grants Pass* FY & REPORT # EA Number OR-110-02-20

ACTION/TITLE: *Rogue River Ranch Water Treatment System Upgrade Project*
LOCATION: *T. 33S, R10W, Sec. 9, WM*

FOR FURTHER INFORMATION CONTACT: Abbie Jossie
Medford District Office, BLM
3040 Biddle Road
Medford, Oregon 97504
(541) 618-2303

| INTERDISCIPLINARY PREPARERS | TITLE | RESOURCE VALUES ASSIGNED | INITIAL & DATE |
|---|---|---|---|
| John Bethea | Forestry Tech. | Team Leader | |
| Leslie Welch | Wildlife Biologist | Prime or Unique Lands, Wildlife, Grazing, and Fisheries | |
| Dave Maurer | Soil Scientist | Floodplains, Wetlands, Soils, Water | |
| Jon Raybourn | Fisheries Biologist | Fisheries | |
| Ann Ramage | Archeologist | Cultural Resources | |
| Eric Schoblom | Park Ranger | Recreation, VRM | |
| Linda Mazzu | Botanist | T&E Plants | |

GRANTS PASS RESOURCE AREA

**"Rogue River Ranch Water Treatment System Upgrade Project"**

ENVIRONMENTAL ASSESSMENT

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# Chapter 1
# Purpose and Need for Action and Alternatives

## A. Introduction and Need for the Proposal

### 1. Introduction

The purpose of this environmental assessment (EA) is to assist in the decision-making process by assessing the environmental and human affects resulting from implementing the proposed project and/or alternatives. The EA will also assist in determining if an environmental impact statement (EIS) needs to be prepared or if a finding of no significant impact (FONSI) is appropriate.

This EA tiers to: (1) the Final EIS and Record of Decision (ROD) dated June 1995 for the Medford District Resource Management Plan dated October 1994; (2) the Final Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated February 1994; (3) the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and its Attachment A entitled the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated April 13, 1994; (4) Record of Decision and Standards and Guidelines for Amendments to the Survey and Manager, Protection Buffer, and other Mitigation Measures Standards and Guidelines dated January 2001.

The proposals area also based on and designed to be consistent with the following river management plans: (1) The current operating Activity Plan for the Hellgate Recreation Section "Rogue National Wild & Scenic River" dated November 1978; (2) The "Record of Decision and Resource Management Plan" dated June 1995; and (3) The "Hellgate Recreation Area Management Plan/Draft Environmental Impact Statement" dated November 2000.

### 2. Need for the Proposal

The drinking water distribution and treatment system at the Rogue River Ranch provides drinking water seasonally to employees and the general public. It is a system that must meet Federal and State drinking water quality standards and must provide verifiably safe drinking water (U.S. Environmental Protection Agency [EPA], Oregon Department of Human Services, Drinking Water Program). The current water system is 10-15 years old and needs to be upgraded to ensure that it continues to meet water quality standards.

The existing water treatment building is housed in an old generator room that is in poor condition. This room needs to be replaced to provide adequate protection of the water treatment system.

The new water treatment system's electrical components will require supplementing the existing renewable power system with the addition of additional solar modules and storage batteries.

## B. Scoping Issues Relevant to the Proposal

Several issues of potential concern were raised by the planning team during the scoping phase of developing the project proposal. They are:

1. Consistency of the proposed action with the mandates of the "Wild and Scenic Rivers Act."
2. Potential impact of the project on the Ranch's cultural or archeological features and its status as a National Historic Site.
3. Potential impact of the proposed project on the "view" as seen from the Ranch grounds and road.
4. Potential impact on the "recreational experience."

## C. Proposed Action and/or Alternatives

1. Alternative 1: No Action

The no action alternative is to continue to use the existing water treatment system housed in its current location.

2. Alternative 2: Proposed Action

The proposed action and significant project design features are as follows. The work is proposed to be started in April of 2002.

a. Drinking water system improvements

The existing water treatment system is housed in the old generator building which is attached to the Main House/Crew Quarters. This 8'x12' structure would be tore down, including the concrete slab foundation. A new concrete slab foundation would be poured with the requisite drain lines re-plumbed under the new slab.

The new building would be designed to match the character of the Main House and Crew Quarters which it will be attached to. The dimensions will be 1.5' wider (9.5'x12') in size than the existing generator room in order to adequately house the water treatment equipment. It would be constructed using rough cut lumber for any exposed structural members and ½"x6" bevel clear cedar siding. The building would be painted red with white on the trim. The roof design and roofing would be a 6/12 pitch and fire resistance treated wood shingles.

The proposed new water treatment system will include pre-filters, state certified 1-micron filters, a UV disinfection system which meets NSF Standard 55 "Class A" requirements for water disinfection and a ratio chlorine feeder. There will be a 0.2 mg/l free chlorine residual maintained in the water distribution system as required by the EPA for assurance of disinfection. Using a UV disinfection system eliminates the need for chlorine contact tanks and higher levels of free chlorine residual in the distribution system and requires a much smaller size building to house the system.

b. Power system upgrade: Solar panel array and battery storage

The existing solar module array that provides 12 volt DC power for different Ranch electrical power loads has six solar modules attached to a mount on top of a 7' high 4" diameter pole. To meet the new power loads of the proposed water treatment system an additional six solar modules will need to be installed. This will require extending the 4" array pole 2' higher and replacing the "top of pole mount" with a mount that is designed for twelve solar modules. Inside the power shed building the existing 12-VDC battery storage bank consisting of four separate batteries will be expanded to eight batteries. The extension of the 4"pole by 2' and the installation of six more modules would be slightly more visible but only from the surrounding Ranch grounds.

3. Project Design Features for All Action Alternatives

Project design features (PDFs) are included for the purpose of reducing anticipated adverse environmental impacts identified in the scoping process and which might stem from the implementation of the proposed action or alternatives. This section outlines these PDFs.

a. Season and timing of operations

To the extent possible, work would be accomplished in April/May 2002. This is to ensure that the water system is safe and fully functioning when the primary river use season begins. During the construction period, the public water system will be shut down. The basement of the caretakers house will be used to temporarily house the needed filters, chlorine feeder and chlorine contact tank that will ensure safe potable water for employees during construction.

b. Waste Materials disposal

Waste materials from the project would be removed and disposed of at an approved disposal site (e.g., the Merlin Landfill). Wood materials would be burned at a nearby safe location.

## Chapter 2
## Environmental Consequences

### A. Introduction

Only substantive site-specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this chapter. If an ecological component is not discussed, it should be assumed that the resource specialists have considered affects to that component and found the proposed action or alternatives would have minimal or no affects. Similarly, unless addressed specifically, the following were found not to be affected by the proposed action or alternatives: air quality; areas of critical environmental concern (ACEC); cultural or historical resources; Native American religious sites; prime or unique farmlands; floodplains; endangered, threatened or sensitive plant, animal or fish species; water quality; wetlands/riparian zones; wild and scenic rivers; and wilderness areas. In addition, hazardous waste or materials are not directly involved in the proposed action or alternatives.

B. Site Specific and Cumulative Beneficial or Adverse Effects of the Alternatives

1. Resource: Soil / Water

a. Affected Environment

The ranch house sits on a high surface above the flood plain of the river. It is adjacent to Mule Creek and probably elevated above the 50 year flood level of the creek but may be within the 100 year flood level. The 1964 flood (largest in recent history) just touched the lowest corner of the ranch house. Slope is gentle at the ranch house. The ranch house is located in the upper part of an open pasture area where natural vegetation is cleared in a strip averaging roughly 150 feet wide adjacent to and parallel to Mule Creek and running down to the river.

b. Environmental consequences

1) Alternative 1: No Action

Under the no action alternative, the existing drinking water system would continue to provide drinking water for staff and visitors with the probability that within ten years the water quality would not meet drinking water standards. This would occur due to the deterioration of the system and the trend of increasingly strict federal drinking water quality standards.

2) Alternative 2: Proposed Action

Under the proposed action, the existing portion of the ranch house that houses the water treatment system would be widened by 1.5 feet. This 1.5 foot strip would change from an open soil condition to a concrete covered soil. This would restrict soil biological activity from current condition of natural levels of respiration with some nutrient cycling to one of no respiration and no nutrient cycling. This, however, is limited to the narrow additional strip which is minuscule in relation to the open land of the ranch or the total of the Mule Creek Watershed. There should be no erosion or sediment generated from this project. Drinking water supplied to the public and staff will have higher assurance that it is and will continue to be, through the long term, up to EPA drinking water standards.

2. Resource: Wildlife

a. Affected Environment

The project area does not provide suitable habit for any threatened and endangered or survey and manage species. There are no known northern spotted owl cores or activity centers within 1/4 mile of the project area. Sensitive species of bats are not known to inhabit the generator room structure.

b. Environmental consequences

Neither alternative would have an impact on any threatened or endangered or S&M species. Habitat for these species would not be impacted by the proposed action.

3. Resource: Fisheries

Rogue River and Mule Creek have perennial flows and are used by chinook and coho salmon, and steelhead trout, all of which are anadromous. Resident cutthroat trout are also present. Coho salmon (which are federally listed as threatened) and coho critical habitat are present in both the Rogue and Mule Creek adjacent to the project site. The location of the proposed water treatment building is within the riparian reserve for Mule Creek, but it is well outside of the riparian reserve of the Rogue. The new building would be built at the current location of the water treatment building. The existing building is located within the Rogue River Ranch. This area is landscaped and does not support any natural riparian vegetation.

No effects to fisheries or aquatic resources are anticipated from the proposed actions. This determination includes short and long term, direct and indirect, and cumulative effects. Impacts have been considered temporally on the short term and long term scales, and spatially at the project/site and watershed scales. There is no effect to coho salmon or coho critical habitat from the proposed action. Essential Fish Habitat is not adversely affected by the proposed action. The proposed action does not hinder the attainment of the Aquatic Conservation Strategy Objectives of the Northwest Forest Plan.

4. Resource: Botanical

The water system upgrade at Rogue River ranch is restricted to structures and only slight ground disturbing activities would take place in an already disturbed area. Thus there would be no effects on botanical resources.

5. Resource: Visual Resources / Recreation

The Rogue River Ranch is within the congressionally designated Wild and Scenic river corridor, a VRM class II Zone. The proposed reconstruction of the room to house the water treatment facilities and the installation of the treatment facilities will not impact the visual resources. The reconstruction will retain the same overall lines, scale and color as currently exist. The site is not visible from the Rogue River itself; it will not create any changes to the view from the river. The overall appearance of the ranch to the recreationist visiting the site will remain unchanged except for the subtle changes resulting from the use of new siding that is more consistent with the main house than currently exists.

6. Resource: Cultural

a. Affected Environment.

The Rogue River Ranch was listed on the National Register of Historic Places in 1973. This listing recognized the Rogue River Ranch as the homestead of the first white settlers in the remote Rogue River Canyon area now known as Marial, Oregon. The site was the center of mining and pioneer life; serving at one time as a mining camp, trading post, farm, dance hall, post office, and church. This National Register property consist of 10 structures and various ranchstead improvements such as a garden, grape arbors, and cedar post and rail fencing.

One of the 10 structures is known as the Main Residence. Originally constructed in 1903, the house is 2,404 sq. ft. on two floors, contains a covered porch of 174 sq. ft. and a breezeway of 136 sq. ft. The house is built on a concrete foundation with a vapor barrier, painted lap siding, composition shingle roof, and wood frame windows.

In 1927, Stanley Anderson purchased the property from George Billings. In the following years the original development was changed considerably. In 1963, at the north end of the main residence, a storage room, crew quarters including a bathroom and a generator room were attached to the main building by a porch.

The generator room which is 8 ft. x 12 ft. appears to be hastily constructed. The siding of the generator room does not match the 6 inch bevel siding of the crew quarters. Wood used for wall panels of the generator room had previously been used as concrete forms. In 1976 the room caught fire and burnt

one wall down. This was rebuilt using an assortment of materials including 6 inch tongue and groove for most of the siding.

In 1990 the function of this room was changed to house the new water system filters. There are no interior walls just exposed studs. There are large open holes in the walls from where the generator exhausts were located. There are the two generator concrete pedestals sticking up which create a hazard for maneuvering in the room. The electrical system is in bad repair. The exterior door was made by BLM just a few years ago.

b. Environmental Consequences.

This project would change the width of the generator room by 1.5 feet. Instead of the current size of 8 ft. by 12 ft., the new building would be 9.5 ft. by 12 ft. The siding would be changed to match the crews quarters and the rest of the Main Residence. The roof would be of similar construction to that of the Main Residence and the exterior would be painted to match the rest of the building. Based on these factors we concluded that this historic property would not be adversely impacted.

The proposed action has been consulted on with the Oregon State Historic Preservation Office (SHPO) (December 2001). The SHPO returned a finding of "No Historic Properties Adversely Affected" (December 26, 2001). This finding was contingent on SHPO review of plans/drawings and detailed description of new structure (including proposed materials, etc.) prior to starting work. This is in process.

## Chapter 3
## Agencies and Persons Consulted

### A. Public Involvement

A 15 day public comment period will be held upon completion of the EA.

### B. Agencies consulted

The Oregon Department of Human Services Drinking Water Program was consulted during the design of this water treatment system. The Bureau of Land Management will list the Ranch drinking water system with the Oregon Public Drinking Water System.

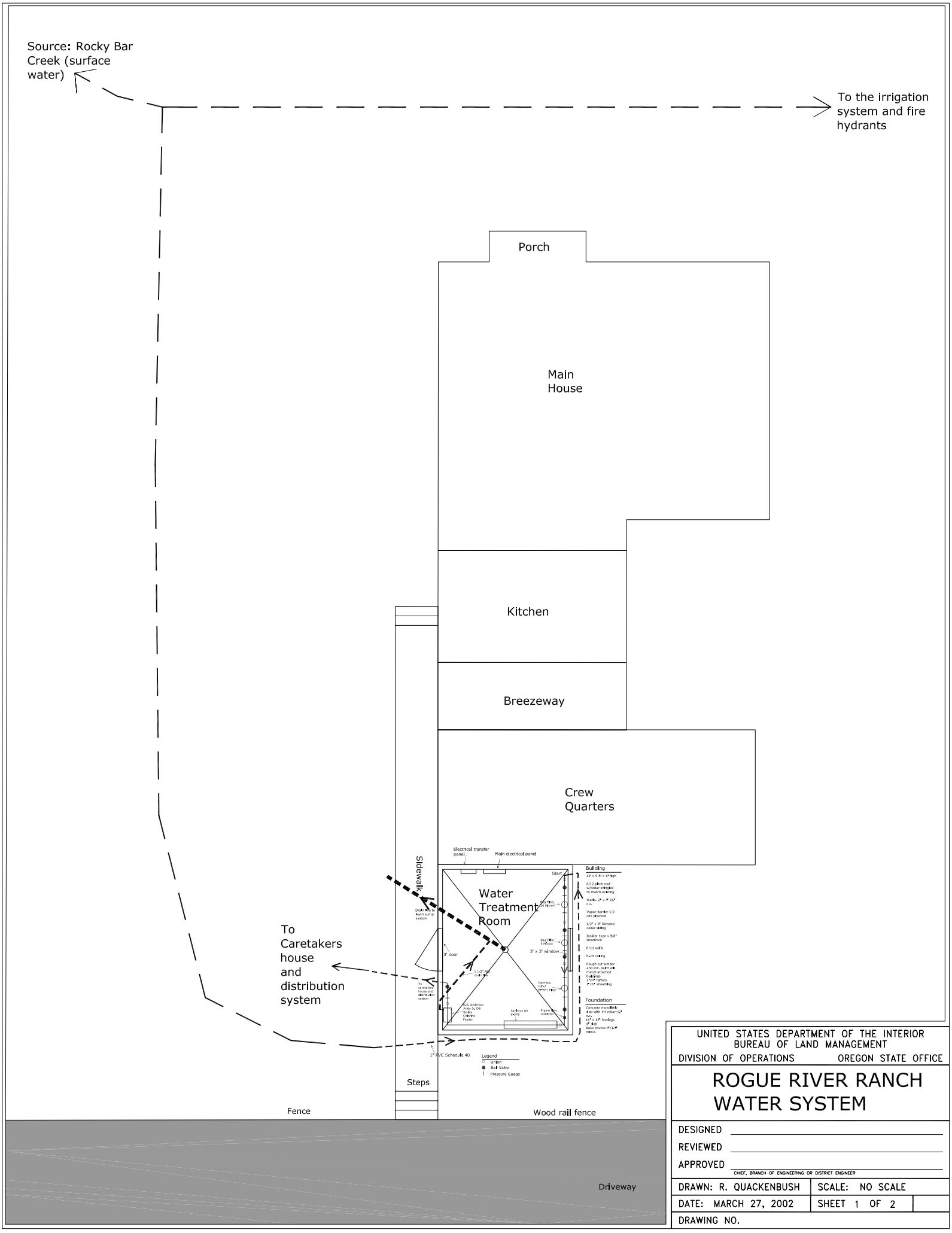
The proposed action has been consulted on with the Oregon State Historic Preservation Office (SHPO) (December 2001). The SHPO returned a finding of "No Historic Properties Adversely Affected" (December 26, 2001) contingent upon their review of plans/drawings and detailed description of new structure (including proposed materials, etc.). This is in process.

### C. Availability of Document and Comment Procedures

Copies of the EA document will be available for formal public review in the BLM Medford District Office. The EA will be also be posted on the Medford District's web site and sent to parties know to have a potential interest in this project. Comments can be sent to the Medford District BLM, 3040 Biddle Road, Medford, OR 97504.

## APPENDIX A
## Issues Considered But Eliminated From Further Discussion

One other location for the water treatment system was considered. The large open shed near the Tabernacle Building. This was eliminated from consideration as this location would have required extensive re-plumbing of the water lines. Using the current location will allow the new system to use all the existing water lines, drain lines and electrical lines. Proximity to the caretakers house to allow for easy access for maintenance and monitoring was also a consideration is eliminating these other sites.

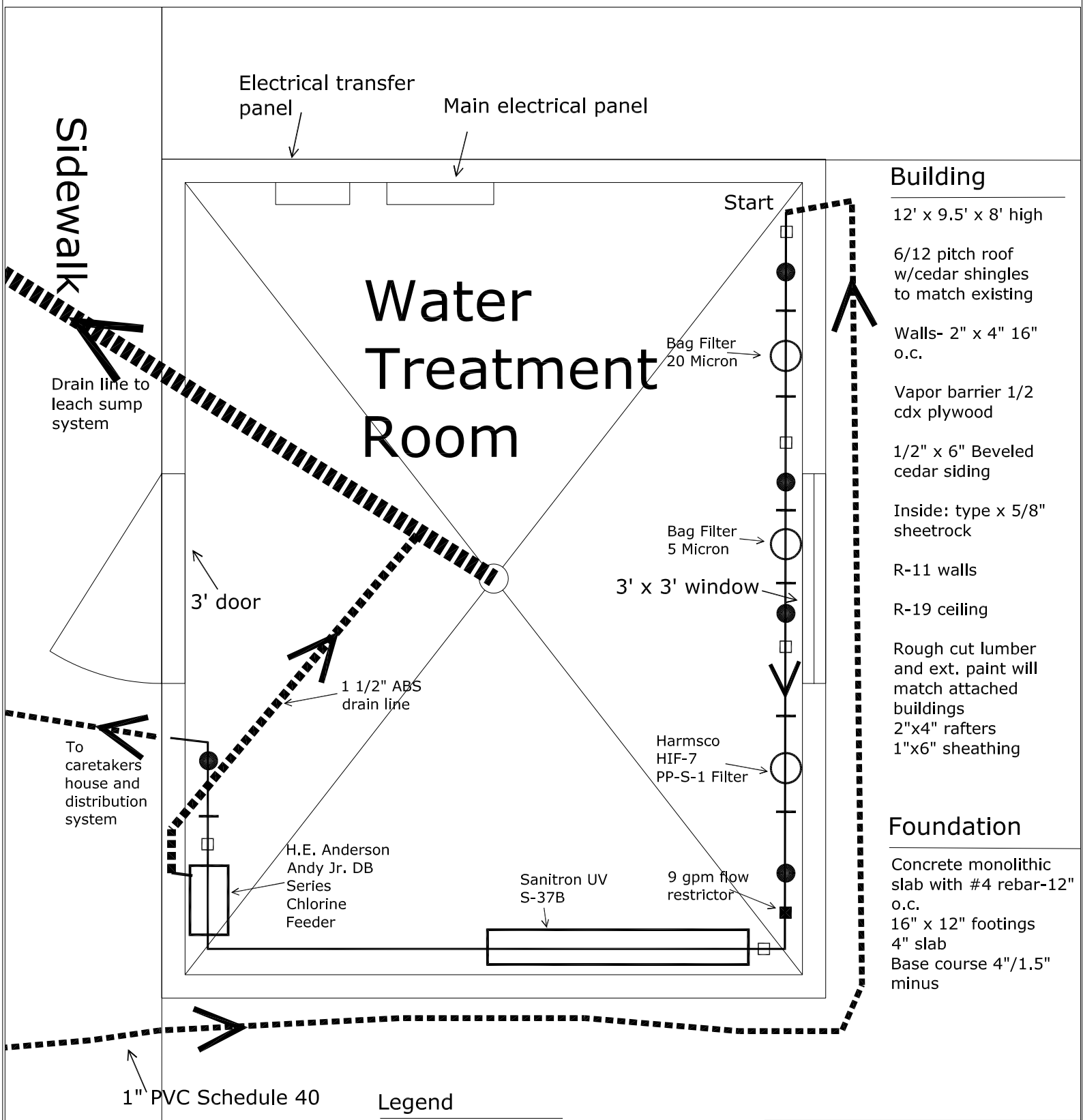



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
DIVISION OF OPERATIONS — OREGON STATE OFFICE

# ROGUE RIVER RANCH WATER SYSTEM

DESIGNED _____
REVIEWED _____
APPROVED _____
CHIEF, BRANCH OF ENGINEERING OR DISTRICT ENGINEER

| | |
|---|---|
| DRAWN: R. QUACKENBUSH | SCALE: NO SCALE |
| DATE: MARCH 27, 2002 | SHEET 1 OF 2 |
| DRAWING NO. | |




## Building

12' x 9.5' x 8' high

6/12 pitch roof w/cedar shingles to match existing

Walls- 2" x 4" 16" o.c.

Vapor barrier 1/2 cdx plywood

1/2" x 6" Beveled cedar siding

Inside: type x 5/8" sheetrock

R-11 walls

R-19 ceiling

Rough cut lumber and ext. paint will match attached buildings
2"x4" rafters
1"x6" sheathing

## Foundation

Concrete monolithic slab with #4 rebar-12" o.c.
16" x 12" footings
4" slab
Base course 4"/1.5" minus

## Legend

- □ Union
- ● Ball Valve
- | Pressure Guage

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
DIVISION OF OPERATIONS OREGON STATE OFFICE

# ROGUE RIVER RANCH WATER TREATMENT ROOM

DESIGNED _____
REVIEWED _____
APPROVED _____
CHIEF, BRANCH OF ENGINEERING OR DISTRICT ENGINEER

| | |
|---|---|
| DRAWN: R. QUACKENBUSH | SCALE: NO SCALE |
| DATE: MARCH 27, 2002 | SHEET 2 OF 2 |
| DRAWING NO. | |

Photo No. 2.
Main Residence at the Rogue River Ranch

Photo No. 3.  Close up, showing the screened porch, crew's quarters, and generator room.

Photo No. 4. South side of generator room which we are proposing to replace.

Photo No. 5. North side of generator room. Note holes in the wall which are remnants of the exhaust system for the generator formerly housed in this room.

Photo No. 6. Close up of the East side of generator room that we are proposing to replace.

Photo No. 7. East side of the generator room. New building would be expanded 1.5 feet to the right in this photo.